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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/840,151 | 04/24/2001 | Yoshiko Akazawa | 1573.1005 | 3422 |

21171 7590 05/05/2004

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EXAMINER

PESIN, BORIS M

ART UNIT PAPER NUMBER

2174

DATE MAILED: 05/05/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

5

Office Action Summary

Application No.

09/840,151

Applicant(s)

AKAZAWA ET AL.

Examiner

Boris Pesin

Art Unit

2174

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6,8-10,12-14,16-19,21-23,25-27,29-31 and 33-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,2,4-6,8-10,12-14,16-19,21-23,25-27,29-31 and 33-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This communication is responsive to Amendment A, filed 2/03/2004.
2. Claims 1-2, 4-6, 8-10, 12-14, 16-19, 21-23, 25-27, 29-31, and 33-39 are pending in this application. Claims 1, 9, 18, 26, 35, and 39 are independent claims. In the Amendment A, Claims 1, 4, 5, 8, 9, 12, 13, 16, 18, 21, 22, 25, 26, 29, and 30 were amended. This action is made Final.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

Claims 1-2, 4-6, 8-10, 12-14, 16-19, 21-23, 25-27, 29-31, and 33-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burge et al. (US 6014638) in view of Brush, II et al. (US 6366285).

In regards to claim 1, Burge teaches an information processing apparatus comprising a memory device and a processor, said memory device having a first memory area for storing data inputted by a user and a second memory area for storing data representative of a plurality of respective virtual worlds; said processor causing an image of a first virtual world to be displayed on a display, data representative of said first virtual world being stored in said second memory area, said first virtual world including a predefined objects, said objects being associated with respective a specific items of content(i.e. *"The phase begins when the user (shopper) 10 accesses the system and begins to browse by making selections 12. Displays from which the user 10*

may make selections are developed by the Browse/Purchase process 14 of the electronic shopping manager. In some instances, the Browse/Purchase process may access a database containing information about specific products and services offered by merchants 22." Column 6, Line 30); and variably determine, in accordance with derived weighted features, a second world which includes other objects, said other objects having a respective specific optimal items of content and respective specific optimal positions in said second virtual world, for said derived weighted features; and said processor allowing an image of said second virtual world to be displayed on said display (i.e. *"During the display customization phase, displays with content regarding (1) general merchant information or options and/or (2) specific merchant product and service information or options are customized to conform to the shopper's preferences as indicated in the shopper's profile. A predictive model is applied to the profile data to select display characteristics and elements--such as the nature of items selected for the shopper, similarities to products recently purchased, icon or button locations, colors for background, icons/buttons, and text, fonts, etc.--for generating a display that is likely to reflect the shopper's preferences. The items that appear on the display (as represented by icons or buttons) may relate to a general topic, category, or area of interest (e.g., casual clothiers, camping equipment.) Items on a display may also relate generally to a group of merchants (e.g., ABC Co. Clothing, XYZ Camping Warehouse.) Finally, items may be merchant specific (e.g., ABC hiking boots, ABC jackets.)"* Column 5 Line 64 – Column 6 Line 14). Burge does not teach an apparatus wherein the virtual worlds are three-dimensional. Further, Burge does not teach an apparatus wherein the avatar is

controlled to act in the virtual world by the user. Further, Burge does not teach an apparatus wherein the processor analyzes the action of the avatar in the virtual world to derive weighted features of said user from the positions and behaviors of the avatar relative to positions of the predefined objects in the virtual world. Brush teaches, an apparatus wherein virtual worlds are three-dimensional (i.e. *"The surroundings of the preferred embodiment is the backyard of a virtual house existing in a virtual world visited by the user; although a virtual world could be created to be any perceived world, both those mimicking our reality and those of science fiction."* Column 5, Line 14).

Brush further teaches an apparatus wherein the avatar is controlled to act in the virtual world by the user (i.e. *"In addition, however, the user is able to move away from the dog to view interactions, provided the user does not move beyond the outer selection range. This approach of multiple selection ranges allows the user to interact much like the real world where people are able to step closely to introduce themselves and then step back while continuing a conversation."* Column 3, Line 29). Lastly, Brush teaches an apparatus wherein the processor analyzes the action of the avatar in the virtual world to derive weighted features of said user from the positions and behaviors of the avatar relative to positions of the predefined objects in the virtual world (i.e. *"By defining an infinite range proximity sensor as defined by today's virtual world languages, the framework can monitor movement of all objects in the world. Once an object registers inner and outer selection ranges with the framework, the framework proceeds to monitor avatar movements and triggers selection events when an avatar enters an object's inner selection range. The framework then sends a de-selection event whenever the avatar*

moves beyond the outer selection range. Thus, by framework enhancements, an avatar is able to move close enough to select an object and then step back to perceive the interactive relationship." Column 3 Line 64 – Column 4 Line 8). Because Brush already has many different weighted features in his invention (i.e. *"the store visited, time of visit, merchandise viewed by shopper..."*Column 6, Line 56); it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Burge with the teachings of Brush and include a three-dimensional shopping virtual world with an avatar and also monitor the behavior of avatars in respect to their relative position with the predefined objects with the motivation to provide the user a more realistic and convenient shopping experience.

In regards to claim 2, Burge and Brush teach all the limitations of claim 1. Burge further teaches an information processing apparatus wherein a set of definition data of said second virtual world is selected from sets of definition data of said respective virtual worlds (i.e. *"Display attributes for individual items (i.e., item graphics) may also be variable. Some icons or buttons (i.e., items) may be large or small and rectangular, square, or round. Some items may have associated text. Finally, an icon or button may contain a different picture depending on a user's preferences (e.g., store logo, product picture, product symbol.) In other words, several different pictures may be used to represent the same pair of hiking boots."* Column 6, Line 15).

In regards to claim 4, Burge and Brush teach all the limitations of claim 1. Burge further teaches an information processing apparatus, wherein a further weighted feature of said user is derived from a message inputted by said user to determine said second

virtual world (i.e. *"Profile data for the shopper (i.e., user data) 16 is stored in a User Profile Database 18. Profile data may also include personal data and details (e.g., age, sex) provided by the shopper when joining or subscribing to the service. This personal information may also be stored in the User Profile Database 18."* Column 7, Line 1).

In regards to claim 5, Burge and Brush teach all the limitations of claim 1. Burge further teaches an information processing apparatus wherein a further weighted feature of said user is derived from data related to said user to determine said second virtual world (i.e. *"the store visited, time of visit, merchandise viewed by shopper..."*Column 6, Line 56).

In regards to claim 6, Burge and Brush teach all the limitations of claim 1. Burge does not teach an information processing apparatus wherein said second virtual world includes said avatar. Brush teaches an apparatus wherein the virtual world includes an avatar (i.e. *"An avatar is implemented to represent a user, or one or more aspects of a user, in a virtual world."* Column 1, Line 9).

In regards to claim 8, Burge and Brush disclose all the limitations of claim 1, but do not specifically disclose the ability to access the definition data of the virtual world with the URL. However it is inherent in the invention that when something is accessed on the Internet, it is via a URL.

Claim 9 is in the same context as claim 1; therefore it is rejected under similar rationale.

Claim 10 is in the same context as claim 2; therefore it is rejected under similar rationale.

Claim 12 is in the same context as claim 4; therefore it is rejected under similar rationale.

Claim 13 is in the same context as claim 5; therefore it is rejected under similar rationale.

Claim 14 is in the same context as claim 6; therefore it is rejected under similar rationale.

Claim 16 is in the same context as claim 8; therefore it is rejected under similar rationale.

In regards to claim 17, Burge and Brush disclose all the limitations of claim 9, and further disclose a Merchants Products and Services Database (Burge, Column 9, Line 61), or definition data, that may be used to create a virtual world based on the users interests.

Claims 18,19, 21, 22, 23 and 25 are in the same context as claims 1, 2, 4, 5, 6 and 8 respectively; they are therefore rejected under similar rationale.

Claims 26, 27, 29, 30, 31, 33, and 34 are in the same context as claims 9, 10, 12, 13, 14, and 16 respectively, they are therefore rejected under similar rationale.

Claim 35 is in the same context as claim 1; therefore it is rejected under similar rationale.

In regards to claim 36, Burge and Brush teach all the limitations of claim 1. Burge discloses that the user inputted data is message data (Column 5, Line 61).

In regards to claim 37, though Burge does not specifically disclose that he obtains the data associated with the virtual world through a URL, it is inherent in the invention that when something is accessed on the Internet, it is via a URL.

In regards to claim 38, Burge and Brush teach all the limitations of claim 1. Burge discloses a method where in the data associated with said virtual world is The Merchants Products and Services Database, or the definition data (Column 9, Line 61).

In regards to claim 39, Burge teaches a method for a virtual world, comprising: determining whether or an extent to which an object in the virtual world is of interest to the user by analyzing a history of past actions in the world with respect to objects in the virtual world, the objects including the object (i.e. *"The phase begins when the user (shopper) 10 accesses the system and begins to browse by making selections 12. Displays from which the user 10 may make selections are developed by the Browse/Purchase process 14 of the electronic shopping manager. In some instances, the Browse/Purchase process may access a database containing information about specific products and services offered by merchants 22."* Column 6, Line 30); and providing a virtual world scene to the user, where the object determined to be of interest to the user is specifically arranged or presented within the scene according to the user's determined interest or extent thereof in the object (i.e. *"During the display customization phase, displays with content regarding (1) general merchant information or options and/or (2) specific merchant product and service information or options are customized to conform to the shopper's preferences as indicated in the shopper's profile. A predictive model is applied to the profile data to select display characteristics and*

elements--such as the nature of items selected for the shopper, similarities to products recently purchased, icon or button locations, colors for background, icons/buttons, and text, fonts, etc.--for generating a display that is likely to reflect the shopper's preferences. The items that appear on the display (as represented by icons or buttons) may relate to a general topic, category, or area of interest (e.g., casual clothiers, camping equipment.) Items on a display may also relate generally to a group of merchants (e.g., ABC Co. Clothing, XYZ Camping Warehouse.) Finally, items may be merchant specific (e.g., ABC hiking boots, ABC jackets.)" Column 5 Line 64 – Column 6 Line 14). Burge does not teach a method wherein the virtual worlds are three-dimensional. Further, Burge does not teach a method wherein the avatar is controlled to act in the virtual world by the user. Further, Burge does not teach a method wherein determining whether or an extent to which an object in the three-dimensional virtual world is of interest to the user comprises analyzing a history of past actions of an avatar in the world with respect to objects in the three-dimensional world. Brush teaches, a method wherein virtual worlds are three-dimensional (i.e. *"The surroundings of the preferred embodiment is the backyard of a virtual house existing in a virtual world visited by the user; although a virtual world could be created to be any perceived world, both those mimicking our reality and those of science fiction."* Column 5, Line 14). Brush further teaches a method wherein the avatar is controlled to act in the virtual world by the user (i.e. *"In addition, however, the user is able to move away from the dog to view interactions, provided the user does not move beyond the outer selection range. This approach of multiple selection ranges allows the user to interact much like the real*

world where people are able to step closely to introduce themselves and then step back while continuing a conversation." Column 3, Line 29). Lastly, Brush teaches a method of analyzing avatars with respect to objects within the three-dimensional virtual world. (i.e. *"By defining an infinite range proximity sensor as defined by today's virtual world languages, the framework can monitor movement of all objects in the world. Once an object registers inner and outer selection ranges with the framework, the framework proceeds to monitor avatar movements and triggers selection events when an avatar enters an object's inner selection range. The framework then sends a de-selection event whenever the avatar moves beyond the outer selection range. Thus, by framework enhancements, an avatar is able to move close enough to select an object and then step back to perceive the interactive relationship.*" Column 3 Line 64 – Column 4 Line 8).). Because Brush already stores the users history of past actions in his invention (i.e. *"the store visited, time of visit, merchandise viewed by shopper..."*Column 6, Line 56); it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Burge with the teachings of Brush and include a three-dimensional shopping virtual world with an avatar and also monitor the behavior of avatars in respect to their relative position with the predefined objects with the motivation to provide the user a more realistic, convenient, and automated shopping experience.

Response to Arguments

Applicant's arguments with respect to claims 1, 9, 18 26, and 35 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments in regards to dependent claim 5 filed 2/03/04 have been fully considered but they are not persuasive.

Applicant argued the following:

a. The prior art does not teach nor suggest the limitation of claim 5 wherein "a further weighted feature of said user is derived from data related to said user to determine said second virtual world".

In regards to applicant's argument found above, the Examiner disagrees for the following reasons:

Per argument (a), Burge clearly teaches deriving many weighted features of the user from the data related to the user to determine a second virtual world (i.e. "to develop preference profile ... the following data may be collected ... the store visited, time of visit, merchandise viewed by shopper..." Column 6, Line 53-67).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boris Pesin whose telephone number is (703) 305-8774. The examiner can normally be reached on Monday-Friday except every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on (703) 308-0640. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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